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ABSTRACT

The literature on the evaluation of curriculum development reveals several characteristics of curriculum planning and implementation processes that are likely to facilitate change. Part 1 of this two-part report presents the results of an analysis of 34 documents, available through the ERIC system, on curricular development. Each of several factors involved in successful curricular development (including curriculum planning, the roles played by individuals in the process, the classroom environment, the curriculum change concerned, and the evaluation strategy) is broken down into several topic areas, and the documents addressing these topics are identified. From this review the author concludes that successful innovations involve child-centered, individualized curricula as well as teachers as primary "change agents," continuous parent and community involvement, inservice activities building teacher competencies, basic skills and career awareness components, systematic planning for change, awareness of staff roles, and good evaluation and monitoring systems. Part 2 of the report offers a linear process model, based particularly on the work of Ronald Doll, for defining collective and individual roles in the curriculum development process. Special attention is paid to the role played by the central office staff. Relevant documents from the 34 listed are again noted. (PGD)

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The Process of Curriculum Development:

An Overview of Research

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THE PROCESS OF CURRICULUM DEVELOPMENT:

AN OVERVIEW OF RESEARCH

Introduction

In cooperation with the Toledo Public Schools Central Office, an ERIC search was conducted by the University of Toledo Center for Educational Research and Services to summarize research related to the role of public school central office staff in planning and implementing curricular change. The search revealed over 100 books, articles, and other published materials related to bringing about curricular change in urban schools. Of these, the most revealing sources were those which dealt with the evaluation of the curriculum development process. Part I of this report summarizes elements of change found in successful curriculum development programs. Part II focuses on one particular process model outlining the role of central office staff in bringing about curricular change.

Part I

Very little research exists which evaluates the effectiveness of curriculum change processes. One problem appears to be "the absence of reliable measures of implementation," with many studies relying on 'reported use' as the principle method of evaluation (17). Only 12 percent of the studies surveyed actually attempted to evaluate curriculum change. Evaluation studies were concerned primarily with curriculum innovations in reading and/or math (improvement of basic skills) and/or vocational education (development of career awareness). One study evaluated English programs nation-wide; another evaluated a bi-lingual program.

The following summary of evaluation studies addresses the question: "What

characteristics of curriculum planning and implementation processes are most likely to facilitate change?"

Elements of Change in Successful Curriculum Development

Planning the Curriculum

1. In planning curriculum, the total environment of the child is taken into consideration. The school, the home, and the community are influential factors in designing effective child-centered curriculum (3, 9, 24, 32, 34).

2. The teacher is recognized as the most influential change agent and is always involved in planning the curriculum (1, 4, 10, 11, 12, 15, 19).

3. Parents are involved not only in planning for change, but also in the implementation process. Parent/school communication is critical to any program's success (7, 12, 24, 26, 27, 33).

4. Community involvement extends beyond a small group of interested parents. Career awareness programs especially emphasize this component. Community coordinators are used to aid in the process. For example, the community coordinator may act as a liason between schools and the business community on matters concerning field trips, school-based career activities, etc. (12, 24, 27, 28, 29, 32, 22).

5. The schools are democratically organized, with the more successful ones involving children in the curriculum planning (11, 12, 19, 25).

6. Program goals and objectives are honestly set, measurable, and not too numerous to evaluate within time and cost restraints. Successful programs avoid imposing an artificial ceiling on outcomes. "Unless teaching and testing programs are adequately individualized, ceiling effect (i.e. 80% will improve...) interfere with and/or mask improvements that take place but don't, or take place

and are not measured" (14, 31, 33, p. 15).

7. A "sequence interlock" is built into the program planning and implementation process. Systematic steps are outlined to insure that innovation in the schools are not initiated before a coordinator is identified and roles are specifically defined (12, 33).

8. A plan for equitable allocation of resources (especially materials and program specialist services) among schools is an integral part of the change process (12, 32).

9. Adequate evaluation and measuring techniques are built into the plan from the very beginning and are not viewed as a separate function unrelated to planning and implementation processes (12, 14, 33).

10. A system of renewal strategies are built into the plan: continuous imput from children, teachers, administrators, parents, and community; systematic planning and implementation of inservice and follow-up inservice activities; adequate use of expressed needs and concerns among all individuals--an adequate system for meeting needs as they arise throughout the planning and implementation processes (12, 15, 19, 32).

Characteristics of Successful Educational Programs Following Curriculum Re-Design

In describing the specific characteristics of effective educational programs, three subcategories arise: 1) characteristics of the people involved in the change process; 2) the nature of the classroom environment; and 3) the nature of the curricular changes.

The People

1. Personalized teacher-student relationships, including some on-going counseling by teachers (13, 15, 25, 29).

2. Respect of the staff, community, and children for themselves and others in the schools (5, 34).

3. Teachers reflect positive attitudes toward curricular change (10, 12, 19, 30).

4. Administrators respect the professional integrity of the teachers (5, 12, 19, 34).

5. Children are involved whenever possible in the curriculum planning process (1, 10, 14, 15, 25).

6. Department chairpersons (secondary) and content area chairpersons (elementary) contribute significantly in strengthening the entire program, especially if some classroom supervision occurs (12, 30).

7. District supervisors and principals have little direct effect on teaching experiences (4, 8, 12, 30).

8. Principals who have the most influence are carefully selected and prepared individuals who are sensitive to the critical educational concerns of children, parents, and citizens (5, 12, 19, 25, 34).

The Classroom Environment

1. Good classroom discipline prevails in successful programs (13, 15, 34).

2. Concerted efforts are continuously being made to reduce class size (10, 15, 25).

3. Additional personnel (aids and paraprofessionals) facilitate more flexible classroom organization (25, 21, 31).

4. Flexibility of school conduct rules result in relaxed but not undisciplined learning environments (12, 15).

The Nature of Successful Curricular Changes

1. The curriculum is modified to meet the attitudes, interests, and developmental needs of the children (11, 15, 16, 20, 21, 24, 25).

2. Emphasis is placed upon ideas and processes of thought rather than on rote learning (30).

3. Basic skills are emphasized, with intensive reading and math instruction being the skills most often emphasized (7, 13, 32).

4. Career education emphasized "action learning" or involvement in first-hand experiences in not only places of employment, but also in the performing arts and other special areas where skills can be developed along with a deep sense of responsibility for one's behavior as it effects others (28, 29, 32).

5. Adequate resources, especially for math and reading programs, are essential (materials and specialists) (12, 24).

6. Systematic staff development inservice workshops are an integral part of the program. These workshops are aimed at improving and maintaining teacher competencies dealing with innovative program components, such as the use of criterion-referenced testing as a diagnostic instrument (11, 12, 15, 21, 24).

7. Curriculum materials development is undertaken by the teachers in the schools. This is a direct result of in-service staff development (12, 19, 23, 24).

8. Follow-up inservice activities are essential to maintain the interest and use of innovations (11, 12, 19, 21, 32).

Evaluating Curricular Changes

The evaluation studies made the following recommendations concerning the nature of the evaluation strategies used to document change efforts:

1. Evaluation strategies are designed to examine more than "test results." Further, procedures for monitoring changes in the organization, framework, etc., of the school are built into the plan so that evaluation procedures can be adapted accordingly (12, 14, 33).

2. Choice of appropriate measures of academic progress is vital. For example, standardized tests often have limited use in practice, inadequate statistical conversion tables, and no real relevance to classroom experiences (14, 33).

3. Criterion-referenced baseline testing is recommended over norm-referenced testing. Criterion-referenced testing assists in individualizing testing procedures in the classroom (14, 33).

4. If evaluation is too frequent, it interferes with the very process of learning that it is trying to evaluate; if too infrequent, no measurement of learning progress occurs (14, 33).

5. Careful evaluation of pupil progress is essential, with the evaluators never losing sight of the individual differences in children's learning styles and learning rates (14, 33).

Summary

Curricular evaluation studies identify the following elements in successful curriculum development:

1. Child-centered, individualized curriculum innovations
2. The teacher as the most influential "change agent"
3. Continuous parent and community involvement
4. Inservice activities designed to build teacher competencies
5. The importance of basic skills and career awareness
6. The need to plan systematically for change, taking into consideration the roles of key personnel
7. The importance of good evaluation and monitoring systems

Part II

Like most school systems, the Toledo Public Schools are continuously involved in the process of curriculum development. The elements of successful curricular change outlined in Part I are useful only when viewed as parts of the entire curriculum development process. Likewise, the roles of individual central office staff members in this process need to be clearly defined if effective curriculum development is to take place. To help in defining collective and individual roles and responsibilities, the following model is presented.

The Role of the Central Office Staff in Systematic Planning for Change: A Linear Model

The primary source for the following model is Ronald C. Doll's Curriculum Improvement: Decision Making and Process. Other models exist; some will be discussed in the workshop.

Traditionally, curriculum planning takes place at two main sites, central offices and local schools. In recent years, curriculum planning has shifted more and more to the local school level (5, 12, 19). Despite this trend, central offices in large urban school districts have maintained their roles as major leaders in initiating and guiding curriculum change (12).

Doll and other curriculum experts have suggested several advantages and disadvantages of central office "master planning" for curriculum change. Among the advantages are the following:

1. Coordination and comprehensiveness can be made keynotes of system-wide activities; hence, things can run smoothly and handsomely on a larger scale.
2. A major result of systemwide activity is continuity--the presence of a common thread in the curriculum.

3. There is maximum assurance that a given project or product has received the blessing of the central office.

4. Time is saved by avoiding detailed analysis of the needs and problems of individual schools. (This factor can also be a disadvantage as well).

The limitations of central office planning include the following (12, 18):

1. Failure of central office staffs to involve enough professional personnel and laymen in the decision-making process.

2. The well-known tendency of central offices to overemphasize paperwork becomes the downfall of the change process.

3. Central offices often are quick to make systemwide and unfortunate comparisons of teachers and children.

4. The compulsion to issue military-like directives endanger implementation of change processes.

The pitfalls of curriculum planning at the central office level are theoretically reduced by bringing "planners" together with teachers and administrators from the "planned for" local schools (12, 19). Virtually all research indicates that neither models nor curriculum theories bring about change in the schools. Rather, people change things, beginning with their own willingness to change themselves. The individual teacher emerges as the most influential change agent (1, 4, 10, 11, 12, 15, 19). And the impact of central office planning on actual student achievement is limited (4, 12). However, studies of large urban school districts (including Toledo) indicate that successful implementation of change necessarily includes, "encouragement and support by the central school administration and/or community groups " (28).

The process whereby central office staffs plan for and initiate change often takes the form of a linear model. Linear curriculum models, such as those proposed by Ralph Tyler or Mauritz Johnson, include a series of logical steps for developing the curriculum. Such models embrace an ends ——→ means approach, with specific learning outcomes (ends) determined before learning

activities (means) are recommended. Once goals and objectives are written and established as district-wide policy, central office personnel then serve as resources to the teachers and administrators who must implement the means (instructional strategies) to achieve desired ends (learning outcomes).

Curriculum planning at the central office level includes much more than simply writing district-wide goals and objectives. The following is a list of classic steps (and substeps) that the majority of central office curriculum planners follow in bringing about change (12). It should be noted that systematic planning enables central office staffs to remain accountable for their plan.

Curriculum Development:

A Linear Process Model

Ronald C. Doll

Eleven Major Steps

1. Selecting a leader
2. Defining the problem to be addressed
3. Selecting program objectives
4. Designing or selecting the program
5. Developing an implementation plan
6. Considering an evaluation plan
7. Getting approval of the plan and its budget
8. Initiating and operating the plan
9. Concluding work on the plan
10. Evaluating the program
11. Determining the program's future

Step number 5, Developing an implementation plan, involves the following substeps (6, 12):

1. Making a mission statement
2. Setting personnel requirements
3. Specifying the equipment and materials needed
4. Assessing the readiness of the school system for the program
5. Planning selection of the program staff
6. Arranging a schedule for making purchases
7. Orienting the staff
8. Determining costs
9. Arranging a sequence of tasks
10. Making a time line to guide accomplishments of parts of the program
11. Arranging for review of the program by an independent agency

Though Doll and others do not outline substeps for major steps other than "Developing the implementation plan," central office staff generally make several decisions under each category. For example, "Defining the problem to be addressed" may be dependent upon variables in the district which suggest critical areas in need of attention--such as discipline in the schools, poor reading and writing competencies, or low teacher morale. Decisions to be made under major categories will thus be contingent upon central office and local school resources and needs.

Once major steps are undertaken, four basic strategies for improving the curriculum are commonly employed by both central office and local school curriculum planners. These strategies are the following:

1. Inservice education of personnel
2. Supervision of the work of these personnel
3. Reorganizing the schools
4. Using the results of evaluation, research, and experimentation

No one strategy is acclaimed better than the other. Rather, curriculum planners choose carefully the strategy or strategies which best fit a given need. In the end, "all available strategies may be needed to reach the persons who have been identified as 'target' clients'" (12, p. 378).

The steps listed in Doll's process model should prove useful in determining what tasks still need to be performed by the central office staff in the curriculum development process. The many tasks involved in bringing about change in a large urban district are so complex as to defy approaches other than systems strategies. Central office personnel may wish to combine elements of Doll's model with components of other models presented during the workshop.

By combining knowledge of what research says about effective elements of change (Part I) with the logical steps of a linear process model (Part II), the efforts of central office curriculum planners should be enhanced.

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